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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dan Li

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Hanley, Flight & Zimmerman, LLC
150 S. Wacker Drive
Suite 2100
Chicago, IL 60606

EXAMINER

SHIH, HAOSHIAN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,672	Applicant(s) LI ET AL.	
	Examiner HAOSHIAN SHIH	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20090122</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-30 are pending in this application and have been examined in response to application amendment filed on 11/07/2008.

Claim Objections

2. Claim 4 is objected to because of the following informalities: there is an extra "of" on line 6 of claim 4. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyne et al. (Moyne, US 7,109,979 B2) and Vogeley et al. (Vogeley, US 5,633,691).**

5. As to **INDEPENDENT** claim 1, Moyne discloses a method to provide a handheld pointer-based user interface comprising:

encoding a first human-computer interaction (HCI) signal with a first code to correspond to a first HCI position event (col.1, lines 31-33);

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transmitting via a first communication link from a wireless pointer component to one or more base components operatively coupled to a screen of a display (col.1, lines 30-37; col.1, lines 49-54; “first signal transmitter”, a wireless styles for recording a writing performed on a surface is presented);

generating at least one of operating information and position information of the wireless pointer component based on at least one of the first and second HCI signals (col.1, lines 45-47; “position signals”); and

transmitting via a second communication link the at least one of operating information and position information from the one or more base components to a processor configured to generate screen information on the screen of the display (col. 1 lines 34-37, lines 49-53; a detector assembly detects operation information from a stylus, the operation information is then received by a processing unit for displaying the operation information).

Moyne does not specifically disclose encoding a second HCI signal with a second code to correspond to a second HCI position event, wherein the first code and the second code differ to indicate a difference between a first time at which the first HCI position event occurred and a second time at which the second HCI position event occurred.

In the same field of endeavor, Vogeley discloses encoding a second HCI signal with a second code to correspond to a second HCI position event (col.7, lines 22-25; a second code is used to represent a different stylus location);

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wherein the first code and the second code differ to indicate a difference between a first time at which the first HCI position event occurred and a second time at which the second HCI position event occurred (col.3, lines 55-60; col.7, lines 22-25; the timing difference between the first position and the second position are considered).

It would have been obvious to one of ordinary skill in the art, having the teaching of Moyne and Vogeley before him at the time the invention was made, to modify the surface writing system taught by Moyne to include multiple signal codes taught by Vogeley with the motivation being to allow multiple stylus functions to be incorporated in one stylus (Vogeley, col.7, lines 24-26).

6. As to **INDEPENDENT** claim 10, see rationale addressed in the rejection of claim 1 above.

7. As to **INDEPENDENT** 17, see rationale addressed in the rejection of claim 1 above.

8. As to **INDEPENDENT** claim 24, see rationale addressed in the rejection of claim 1 above.

9. As to claims 2 and 11, Moyne discloses at least one of an ultrasonic signal and a radio frequency signal associated with at least one of the first HCI position event and

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the second HCI position event from the wireless pointer component to the one or more base components operatively coupled to the screen of the display (col.1, lines 39-47; “ultrasound signal”, col.2, lines 10-14, ‘position signal receivers”).

10. As to claims 3 and 12, Moyne discloses transmitting one or more HCI signals associated with at least one of writing, drawing, selecting, and scrolling directly on the screen of the display with the wireless pointer component by a user (col.5, lines 29-50).

11. As to claims 4 and 13, Moyne discloses wherein the screen of the display is associated with at least one of a desktop computer, a laptop computer, and a handheld computer (col.1, lines 49-54).

12. As to claims 5 and 14, Moyne discloses transmitting the first HCI signal and the second HCI signal from the wireless pointer component to the one or more base components (fig.6, “110”, stylus sends positional signal, “118” base component process said positional signal) in response to at least one of pressing a tip of the wireless pointer component on the screen of the display, and pressing a button of the wireless pointer component (col.6, lines 40-45; the tip of the eraser is pressed against the writing surface to send an erasing signal). Moyne does not disclose the second HCI signal.

Vogelely discloses the second HCI signal (col.7, lines 22-25; a second code is used to represent a different stylus location).

13. As to claim 6, Moyne discloses transmitting the at least one of operating information and position information from the one or more base components to the processor via one or more communication links operating in accordance with at least one of an 802.11-based communication protocol, a Bluetooth-based communication protocol, and an infrared-based communication protocol (col.13, lines 65-col.14 lines 2).

14. As to claims 7 and 15, Moyne discloses converting the at least one of operating information and position information from a first format to a second format based on configuration information associated with at least one of the one or more base components and the screen of the display (col.1, lines 46-48).

15. As to claims 8 and 16, Moyne discloses generating one or more coordinates of the wireless pointer component relative to the screen of the display based on the at least one of operating information and position information (col.3, lines 65- col.4 lines 3; calculation of the coordinates or position are standard steps in any pointing device).

16. As to claim 9, Moyne discloses operatively coupling the one or more base components on one or more sides of the display to receive the first HCI signal and the second HCI signal. (col.1, lines 60-65; the position signal receivers are configured to receive signals from multiple signal range; col.2, lines 21-23, attachment mechanism”;

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col.2, lines 30-33, "active display"; col.7, lines 38-40; the base device can be anywhere as long as the base component can receive HCI signals).

17. As to claims 18 and 25, Moyne discloses wherein at least one of the first and second HCI position events comprises at least one of writing, drawing, selecting, and scrolling directly on the screen of the display with the wireless pointer component by a user (col.5, lines 29-50).

18. As to claims 19 and 26, Moyne discloses wherein the wireless pointer component comprises at least one of a stylus and an electronic pen (col.1, lines 30-31).

19. As to claims 20 and 27 are similar to claims 8 and 16, and are rejected under the same rationale.

20. As to claims 21 and 28 are similar to claims 4 and 13, and are rejected under the same rationale.

21. As to claims 22 and 29, Moyne discloses the display comprises at least one of a cathode ray tube (CRT) display, a liquid crystal display (LCD), a light-emitting diode (LED) display, and a plasma display (col.1, lines 50-54; the use of common display types are well known in the art).

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22. As to claims 23 and 30 are similar to claim 6, and are rejected under on the same rationale.

Response to Arguments

Applicant's arguments filed 11/07/2008 have been fully considered but they are not persuasive.

23. Applicant argues that Vogeley does not describe a system in which HCI signals are encoded with different codes to indicate a difference between a first time at which a first HCI position event occurred and a second time at which a second HCI position event occurred.

In response to applicant's argument, Vogeley discloses encoding a second HCI signal with a second code to correspond to a second HCI position event (col.7, lines 22-25; a second code is used to represent a different stylus location);

wherein the first code and the second code differ to indicate a difference between a first time at which the first HCI position event occurred and a second time at which the second HCI position event occurred (col.3, lines 55-60; col.7, lines 22-25; the timing difference between the first position and the second position are considered).

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAOSHIAN SHIH whose telephone number is (571)270-1257. The examiner can normally be reached on m-f 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kieu Vu can be reached on (571) 272-4057. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HSS

/Kieu D Vu/
Primary Examiner, Art Unit 2175